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Moscow, Vechernyaya Moskva, 29 Aug 53

The Moscow Machinery Plant imeni Pervoye Maya is increasing its output of new improved machines and tools for light industry.

The plant has organized the production of roller spindles mounted on ball bearings. They are to be used on spinning and twisting machines in the rayon industry.

Cutters, used at footwear factories for cutting soles, formerly were machined. Now the cutters are precision cast. Precision casting of cutters has simplified their production and lowered their cost. At least 12,000 of these cutters will be produced in August.

The machinery assembly shop is assembling an experimental machine for the production of raw silk. It twists four silk threads into one. The machine, designed at Proekt Mashdetal' [Office for Planning Machines and Parts?], will be sent to Leninabad in September for production testing.

The shop is now testing a group of combing machines. These machines will effect a large saving in raw material at enterprises of the linen industry.

INSTITUTE DEVELOPS MACHINES FOR SILK INDUSTRY -- Moscow, Moskovskaya Pravda, 4 Sep 53

Mokeyev, director of the Central Scientific Research Institute of the Silk Industry, told a correspondent of Moskovskaya Pravda that the institute is carrying on research in all fields of silk production. Particular attention is being given to the designing of high-production equipment, to the development of a technology based on this equipment, and to the development of new patterns of silk fabrics from various types of raw materials. [Further comments made by the director follow.]

The silk-twisting mills of the USSR are continuously being equipped with new machines. The Moscow Machinery Plant imeni Pervoye Maya has set up series production of silk-twisting machines of new design. They are one third more productive than similar older models. Nevertheless, in the light of the new tasks facing the silk industry, there is an acute need for further increasing the productivity of preparatory equipment, particularly twisting equipment. The institute is now using an experimental machine for testing a new design of spindle bearings which will make it possible to increase the twisting speed by 3,000 rpm.

A sizing machine for silk yarn has been developed jointly by the institute and the Ivanovo Machine-Building Plant. The new machine has more than doubled the speed of the sizing operation.

Silk fabrics woven on modern looms have up to 20,000 warp threads. At present, when the warp is replenished, the threads are tied by hand. To mechanize this labor-consuming operation, the institute has developed a warp-tying machine. Experimental models of a portable and stationary warp-tying machine have already been made. Tests have verified their high-production qualities. The machine ties the warp twice as fast as it can be done by hand.

Silk enterprises are in great need of such machines. Unfortunately, Glavlegmash (Main Administration of Light Machine Building) is setting up their series production at a slow rate.

- 2 -

CONFIDENTIAL

CONFIDENTIAL

50X1-HUM

The ChGSP high-speed silk loom can be seen at mills where silk cloth is manufactured. The over-all size of the machine has been decreased by one third, but its productivity has been increased by nearly 30 percent. These machines are now being series produced. Recently, a new model of a silk loom, based on the ChGSP, was installed at the experimental shop of the institute. The weaver's work on this machine has been reduced to tending the machine's working mechanisms. This automatic silk loom will soon be turned over to a manufacturing plant, which is to organize its mass production.

The institute also has participated in the development of other machines for the silk industry. These include such machines as a high-speed warping frame, a napping machine for producing velour and velvet, a weft spooling automatic, equipment for continuous decoction and dyeing of silk fabrics, etc.

Instruments developed at the institute for controlling and regulating technological processes are of great industrial importance. One of these instruments, an electronic stroboscope, is designed to determine the speed of twisting-machine spindles. In determining the speed of twisting, a considerable amount of time usually was consumed. A group of spindles had to be stopped and a piece of yarn had to be cut and unwound on a special instrument. This process took several hours. The new instrument can determine the speed of twisting without stopping the spindles.

Another instrument is used for determining the shade of raw silk. The shade has an important bearing on the quality of the product. The device, made at the institute, has a chamber, the bottom of which is illuminated by a special lamp. A skein of raw silk is placed in it, and the shade can be immediately determined. The skeins are sorted for consistency in shade and are sent on for production.

#### NEW TEXTILE MACHINES -- Leningradskaya Pravda, 1 Sep 53

The Leningrad Vulkan Machine-Building Plant, which supplies equipment for enterprises of the light industry, has increased its output of machines in the postwar years more than elevenfold. Thirty-six types of new mechanisms have been perfected during this period.

Cotton-carding machines manufactured earlier by the plant process up to 5 kilograms of cotton an hour. The new ChM-305-3 carding machine, the first models of which are to be installed at the Vozrozhdeniye Mill, will process up to 9 kilograms of cotton an hour.

Among the improvements which are bettering the working conditions of carding machine operators is a device for clearing the surface of the cylinders automatically. The dust is now deposited in a condenser. Formerly, the cylinders had to be stripped by hand every 2 hours.

A cotton analyzer has also been developed. It has decreased the time for analyzing cotton from one hour to only 15 minutes.

A warp-knitting machine for silk tricot is now being manufactured. The productivity of the machine should be about 20 percent as great as the productivity of those now in use. At the beginning of 1954, a weft-knitting machine for making high-quality curtain fabric and a semiautomatic machine for making silk-woolen fabric with a nap will be put into series production.

- 3 -

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50X1-HUM

NEW MACHINES FOR THE PAPER AND TEXTILE INDUSTRIES -- Leningradskaya Pravda,  
28 Aug 53

The Leningrad Plant imeni Karl Marx only recently started building looms for making fine metal screens used in papermaking machines.

The first TM-200 and TM-250 looms for this purpose were designed and released in 1953 for the Kamskiy Metal Screens Plant of the Ministry of Timber and Paper Industry.

The plant recently produced a series of high-production machines for light industry, including spinning machines for flax, twisting frames, tiered twisting (krutil'noetazhnyy) machines, spinning machines for caprone, a dryer for staple aggregates, etc.

The plant is making efforts to improve its products and to decrease the weight of the equipment it produces. For example, a change in the technology of manufacturing friction rolls lowered the weight of caprone spinning machines by 1,750 kilograms. The plant has saved a total of 35 tons of cast iron, 32 tons of steel, and about 2 tons of nonferrous metal in 1953 on this series of machines.

INEFFICIENT USE OF HIGH-PRODUCTION EQUIPMENT -- Tashkent, Pravda Vostoka,  
5 Sep 53

High-production equipment at the Tashkent Tashsel'mash, Tashtekstil'mash, and Uzbeksel'mash Plants is being used at only 75 percent of its capacity. At the same time, labor-consuming work such as carrying, transferring, and loading raw materials and parts is being done manually.

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